



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0683; Directorate Identifier 2014-NM-196-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all The Boeing Company Model 767-200, -300, and -300F series airplanes. This proposed AD was prompted by a finding that certain barrel nuts installed at the vertical fin may be subject to stress corrosion and cracking. This proposed AD would require either repetitive inspections of vertical fin barrel nuts for corrosion or a magnetic check to identify certain barrel nuts, and corrective actions if necessary. We are proposing this AD to detect and correct corroded and loose barrel nuts that attach the vertical fin to body section 48, which could result in reduced structural integrity of the vertical fin attachment joint, loss of the vertical fin, and consequent loss of controllability of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA 2015-0683.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0683; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Berhane Alazar, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6577; fax: 425-917-6590; email: berhane.alazar@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-0683; Directorate Identifier 2014-NM-196-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On May 16, 2003, we issued AD 2003-10-11, Amendment 39-13156 (68 FR 28703, May 27, 2003), to require replacement of H-11 steel barrel nuts with new Inconel barrel nuts, because of possible corrosion and cracking. AD 2003-10-11 applied to Model 767-200 and -300 airplanes, line numbers 1 through 574 inclusive.

We have received a report of H-11 steel barrel nuts installed on an airplane not included in the applicability of AD 2003-10-11, Amendment 39-13156 (68 FR 28703, May 27, 2003). Further investigation has revealed that airplanes with line numbers 575 through 681 had either H-11 steel or Inconel barrel nuts installed at the 16 vertical fin attachment points. Galvanic corrosion can occur on H-11 steel barrel nuts if moisture is present. This condition, if not corrected, could result in failure of the H-11 steel barrel nuts that attach the vertical fin to body section 48, which could result in reduced structural integrity of the vertical fin attachment joint, loss of the vertical fin, and consequent loss of controllability of the airplane.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014. The service information describes procedures for repetitive inspections of vertical fin barrel nuts for corrosion or a magnetic check to identify certain barrel nuts, and corrective actions if necessary. Refer to this service information for information on the procedures and compliance times. This service information is reasonably available; see ADDRESSES for ways to access this service information.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing the actions specified in the service information identified previously.

Explanation of "RC (Required for Compliance)" Steps in Service Information

The FAA worked in conjunction with industry, under the Airworthiness Directive Implementation Aviation Rulemaking Committee (AD ARC), to enhance the AD system. One enhancement was a new process for annotating which steps in the service information are required for compliance with an AD. Differentiating these steps from other tasks in the service information is expected to improve an owner's/operator's understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The actions specified in the service information identified previously include steps that are identified as RC because these steps have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.

Steps that are identified as RC in any service information must be done to comply with the proposed AD. However, steps that are not identified as RC are recommended. Those steps that are not identified as RC may be deviated from using accepted methods

in accordance with the operator's maintenance or inspection program without obtaining approval of an alternative method of compliance (AMOC), provided the steps identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps identified as RC will require approval of an AMOC.

Costs of Compliance

We estimate that this proposed AD affects 38 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|--|---|-------------------|---|-------------------------------|
| Option 1: Detailed inspections and torque check | 4 work-hours X \$85 per hour = \$340 per inspection cycle | ¹ | Up to \$482,661 per inspection cycle | Up to \$18,341,118 |
| Option 2: Magnetic check | 4 work-hours X \$85 per hour = \$340 | \$0 | \$340 | Up to \$12,920 |

¹For the torque check, operators may choose to rent a special tool, with rental costs up to \$482,321.

We estimate that replacing any barrel nut would take 1 work-hour, at an average labor rate of \$85 per work-hour. We have received no definitive data that would enable us to provide cost estimates for the cost of replacement parts. We have no way of determining the number of aircraft that might need these replacements.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2015-0683; Directorate Identifier 2014-NM-196-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 767-200, -300, and -300F series airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by a finding that certain barrel nuts installed at the vertical fin may be subject to stress corrosion and cracking. We are issuing this AD to detect and correct cracked, corroded, or broken barrel nuts that attach the vertical fin to body section

48, which could result in reduced structural integrity of the vertical fin attachment joint, loss of the vertical fin, and consequent loss of controllability of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection

For airplanes identified in Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014: Do the actions specified in paragraph (g)(1) or (g)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014. Signs of corrosion include, but are not limited to, sealant cracks, sealant bulging, powder residue, and cracked barrel nuts.

(1) At the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, except as provided by paragraph (h) of this AD: Do internal and external detailed inspections of the barrel nuts and sealant for signs of corrosion, and do a torque check of the vertical stabilizer attachment bolts for loose barrel nuts.

(i) If corrosion or any loose barrel nut is found at any attachment point location, before further flight, replace the barrel nut with a new Inconel barrel nut.

(ii) If no corrosion or loose barrel nut is found at any attachment point location, do the actions specified in paragraphs (g)(1)(ii)(A) and (g)(1)(ii)(B) of this AD.

(A) Repeat the inspections and torque check thereafter at intervals not to exceed 18 months until the replacement specified in paragraph (g)(1)(ii)(B) of this AD is done at that attachment point location.

(B) Within 36 months after the effective date of this AD, replace all barrel nuts with new Inconel barrel nuts.

(2) At the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, except as provided by paragraph (h) of this AD: Do a magnetic check to identify H-11 steel barrel nuts.

(i) If any H-11 steel barrel nut is found at any attachment point location, before further flight, do an internal and external detailed inspection of the barrel nut holes and sealant for signs of corrosion, and do a torque check of the vertical stabilizer attachment bolts for loose barrel nuts.

(A) If corrosion or any loose barrel nut is found, before further flight, replace the barrel nut with a new Inconel barrel nut.

(B) If no corrosion or loose barrel nut is found, do the actions specified in paragraphs (g)(2)(i)(B)(1) and (g)(2)(i)(B)(2) of this AD.

(1) Repeat the inspections and torque check thereafter at intervals not to exceed 18 months until the replacement specified in paragraph (g)(2)(i)(B)(2) of this AD is done at that attachment point location.

(2) Within 36 months after the effective date of this AD, replace all H-11 steel barrel nuts with new Inconel barrel nuts.

(ii) If no H-11 steel barrel nut is found at all attachment point locations, no further work is required by this paragraph.

(h) Exception to Service Information Specifications

Where Boeing Alert Service Bulletin 767-53A0261, dated August 12, 2014, specifies a compliance time “after the Original Issue date of this Service Bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install an H-11 steel barrel nut on the vertical stabilizer of any airplane.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) If any service information contains steps that are identified as RC, those steps must be done to comply with this AD; any steps that are not identified as RC are recommended. Those steps that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the steps identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps identified as RC require approval of an AMOC.

(k) Related Information

(1) For more information about this AD, contact Berhane Alazar, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office

(ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6577; fax: 425-917-6590; email: berhane.alazar@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on March 24, 2015.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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